

## REMARKS

This is intended as a full and complete response to the Office Action dated June 15, 2009, having a shortened statutory period for response set to expire on September 15, 2009.

Claims 1-7, 10-16, 19, 21-26, and 28-30 remain pending in the application and are shown above. Claim 27 has been cancelled. Reconsideration of the rejected claims is requested for reasons presented below.

### Claim Rejections Under 35 U.S.C. § 112

Claims 26 and 27 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Applicant respectfully traverses this rejection. The specification, at paragraph [0053] of U.S. Publication No. 2004/0192800, discloses that use of carboxylic acids can "reduce or eliminate the need for conventional catalysts ... especially amine catalysts." Withdrawal of the rejection of claim 26 is respectfully requested.

Claim 27 is rejected under 35 U.S.C. § 112, first paragraph.

Claim 27 has been cancelled.

Claim 25 is rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

In view of the amendment to Claim 25, withdrawal of the rejection is respectfully requested.

Claims 26-27 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Applicant respectfully traverses this rejection. Applicant submits that one of ordinary skill in the art would understand the difference between an "organic polyol

having at least one aliphatic tertiary amine group” and “a tertiary amine catalyst.”  
Withdrawal of the rejection of claim 26 is respectfully requested.

Claim 25 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

In view of the amendment to Claim 25, withdrawal of the rejection is respectfully requested.

Claim 22 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

In view of the amendment to Claim 22, withdrawal of the rejection is respectfully requested.

#### Claim Rejections Under 35 U.S.C. § 103

Claims 1-7, 10-16, 19, and 21-30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Bodnar, et al.* (U.S. 5,143,945), alone, or in view of *Parrish, et al.* (U.S. 5,037,860). The Examiner states *Bodnar* does not particularly teach applicant's recited selections of active hydrogen containing derived polyols of the equivalent weights. The Examiner further states *Bodnar* discloses suitability of the members, such as ammonia, ethylene diamine, trimethylol propane, and ethylene glycol, in forming the polyols of their invention, and the suitability of the molecular weights and functionalities necessary to meet applicant's claimed hydroxyl equivalent values in forming the polyols of their invention.

Applicant respectfully traverses this rejection on the basis that *Bodnar* does not teach an organic polyol having at least one aliphatic tertiary amine group, as recited in the claims. None of the suitable “members” recited above by the Examiner are tertiary amines. Specifically, ammonia and ethylene diamine clearly are not; and trimethylol propane and ethylene glycol do not even contain nitrogen.

Additionally, Bodnar does not disclose an organic polyol having at least one aliphatic tertiary amine group having a number averaged molecular weight of between 240 and 500, as recited in claims 1 and 16; and between 240 and 500 as recited in claim 7. Bodnar discloses a preferred class of crude polyester polyols having a molecular weight in the range of about 225 to about 5,000. However, Bodnar does not teach or suggest that his preferred class of polyester polyols contain at least one aliphatic tertiary amine group.

Furthermore, Bodnar is generally directed to foams suitable for use as insulations. This type of foam tends to be brittle, not tough. In contrast, applicant's foams tend to be stiff and tough, not brittle. In particular, the instant application relates to unreinforced structural foams having the stiffness and toughness associated with foams that do contain such reinforcing materials.

The difference in functional focus between Bodnar and the instant application would not lead a person of ordinary skill in the art to expect that Bodnar's foams would have the same characteristics as the applicant's claimed foams. For example, Bodnar discloses that its foams have a density falling within a range of from about 0.5 to about 20 pounds per cubic foot (pcf), which converts to a range of from about 0.008 to about 0.32 g/cm<sup>3</sup>. Thus, the specific gravity at the high range would be about 0.32, which is much lower than the specific gravity claimed in claim 16, specifically, a specific gravity range from 0.5 to 0.7.

Based on the foregoing, applicant believes the Bodnar, either alone or in combination with Parrish, does not teach or suggest the inventions as claimed. Therefore, withdrawal of the rejection is respectfully requested.

Conclusion

Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully requests that the claims be allowed.

Respectfully submitted,

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